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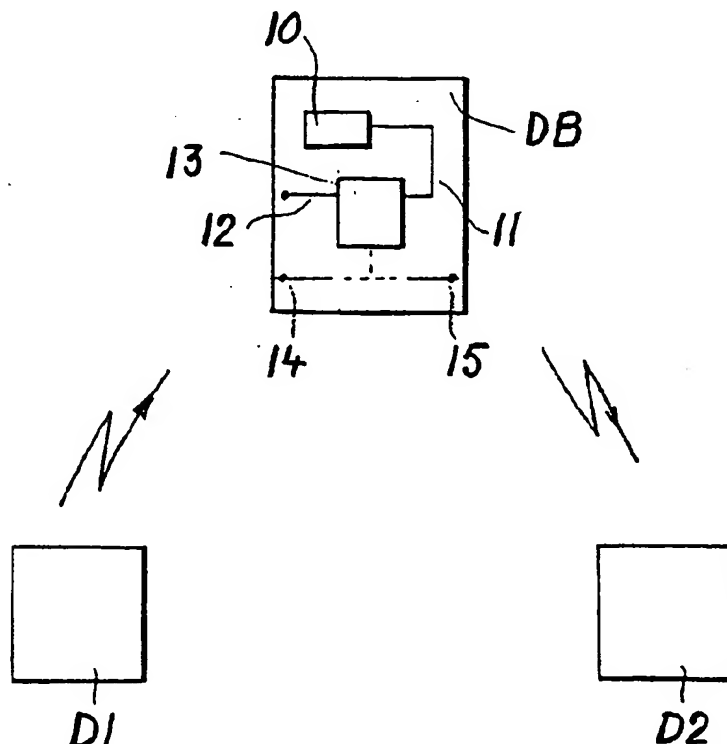
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[Continued on next page]

(54) Title: A METHOD FOR SAFE AND FAST CONNECTION OF A FIRST COMPUTER TO A SECOND COMPUTER HAVING LIMITED ACCESS ABILITY



(57) Abstract: A method for safe and fast connection of a first computer (D1) to a second computer (D2) that has limited access ability involves reading into the first computer (D1) a register-data, which is sent to a databank (DB) that includes a register (10) which includes plurality of fingerprints; reading into the first computer (D1) a fingerprint (12) of a valid user, said fingerprint (12) also being sent to the databank (DB); carrying out in the databank (DB) a comparison between a fingerprint (11) included in said plurality of fingerprints (10) and corresponding to the earlier transmitted register-data on the one hand, and the fingerprint (12) earlier sent by the valid user on the other hand; and connecting the first computer to the second computer (D2) automatically (via 14, 15) when agreement is found between the two fingerprints (11, 12).

WO 03/009113 A1



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

A METHOD FOR SAFE AND FAST CONNECTION OF A FIRST COMPUTER TO A SECOND COMPUTER HAVING LIMITED ACCESS ABILITY

TECHNICAL FIELD

5

The transmission or exchange of information between computers can be effected *per se* relatively quickly and simply with the aid of present-day computer technology. However, the demand for security, simplicity and speed increases with time.

10 For example, a company may wish to contact a branch office in another part of the world whilst avoiding industrial espionage; a physician who needs to read remotely situated case records of a patient will, naturally, do this without an unauthorised person having access to the records at the same time; banks desire to execute their services without danger of currency fraud, which are, unfortunately, ever more usual at the present time. Examples of
15 other situations may include the desire of a salesman to register an order, or the need of a company accountant to check an item in someone's accounts. The use options are many, and computers are now being equipped with fingerprint readers as standard to an ever increasing extent.

20 SUMMARY OF THE INVENTION

The object of the present invention is to provide absolute secure control over what is allowed through to a computer, a database, both quickly and simply without the user needing to learn new codes.

25

The method of safe and quick connection of a first computer to a second computer having a limited access ability involves reading into the first computer a register-data that is sent to a data bank which includes a plurality of fingerprints, reading into the first computer the fingerprint of a valid user, this fingerprint also being sent to the databank; causing a
30 comparison to be made in the databank between a fingerprint included in said plurality of fingerprints and corresponding to the earlier sent register-data on the one hand and the earlier sent fingerprint of the valid user on the other hand; and connecting the first computer automatically to the second computer when agreement is found between the two fingerprints.

DESCRIPTION OF A PREFERRED EMBODIMENT

The invention will now be described in more detail with reference to the accompanying drawing, which illustrates schematically a coupling between two computers.

5

It is desired to connect a computer D1 to a computer D2, which, for some reason, has a limited access ability. This may be because the computer D2 is intended solely for a physician or doctor.

10 Register-data is read into the first computer D1 from a chip or some other electronic storage medium, this data being sent, e.g., via the Internet, to a databank DB that includes a register 10 in which a plurality of fingerprints are stored.

Fingerprints 12 belonging to a valid user (a doctor) are read into the first computer D1 and
15 sent to the databank DB, via the Internet.

It may be appropriate to allow both transmissions between the first computer D1 and the databank DB to take place in an encrypted form.

20 A comparison is made in a comparison circuit 13 in the databank DB between fingerprints 11 included in said plurality of fingerprints 10 and corresponding to the earlier transmitted register-data on the one hand, and the earlier transmitted fingerprint 12 of the valid user (the doctor) on the other hand. The computer D1 and the computer D2 are coupled automatically when agreement is found between the two fingerprints 11 and 12, via points
25 14 and 15, possibly in an encrypted form for encrypted transmission between the two computers.

The connection desired is prevented from taking place when there is lack of agreement between the fingerprints 11 and the fingerprint 12.

30

The proposed computer coupling security routine has been found extremely easy to use and to provide a positive solution to a number of security problems and is thought to have a future in respect of a large number of practical use possibilities.

CLAIM

A method for safe and fast connection of a first computer (D1) to a second computer (D2) that has limited access ability, characterised

5 by reading into the first computer (D1) a register-data, which is sent to a databank (DB) that includes a register (10) which includes plurality of fingerprints;

reading into the first computer (D1) a fingerprint (12) of a valid user, said fingerprint (12) also being sent to the databank (DB); carrying out in the databank (DB) a comparison

10 between a fingerprint (11) included in said plurality of fingerprints (10) and corresponding to the earlier transmitted register-data on the one hand, and the fingerprint (12) earlier sent by the valid user on the other hand; and

connecting the first computer to the second computer (D2) automatically (via 14, 15) when agreement is found between the two fingerprints (11, 12).

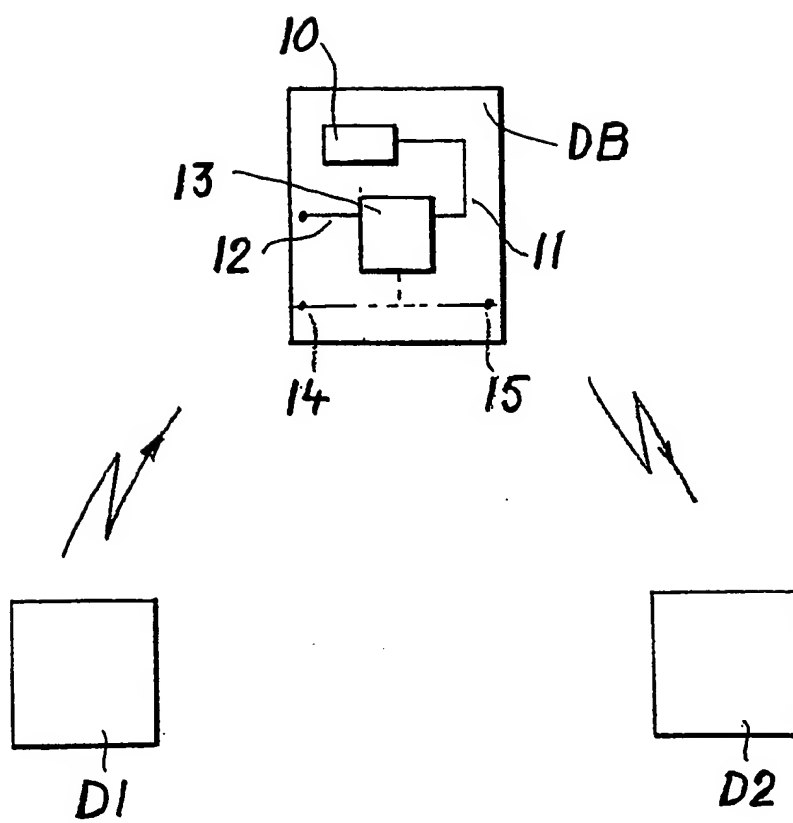


Fig. 1

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5386104 A (SIME, I.R.F.), 31 January 1995 (31.01.95), column 4, line 19 - column 5, line 5, abstract --	1
X	WO 9939310 A1 (PHELPS, B.C.), 5 August 1999 (05.08.99), page 6, line 29 - page 7, line 27, claims 1-2, abstract --	1
X	DE 19809006 A1 (HAMESTER, U.), 9 Sept 1999 (09.09.99), claim 1, abstract --	1

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6256737 B1 (BIANCO, P.G. ET AL.), 3 July 2001 (03.07.01), column 2, line 53 - column 3, line 48, abstract --	1
A	US 5903225 A (SCHMITT, J.C. ET AL.), 11 May 1999 (11.05.99), abstract -- -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

02/09/02

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				EP	0652540 A,B	10/05/95
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